

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	Group Art Unit: Unknown
	)	
Abdalla Aly Naem	)	Examiner: Unknown
	)	
Application No. New (Div. of 09/994,293)	)	INFORMATION DISCLOSURE
	)	<u>STATEMENT</u>
Filed: Herewith	)	
	)	
For: BIPOLAR TRANSISTOR WITH AN ULTRA	)	
SMALL SELF-ALIGNED POLYSILICON	)	
EMITTER (as amended)	)	
	)	
	)	
	)	

Mail Stop Patent Application  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, VA 22313-1450

Sir:

Applicant submits herewith information of which applicant is aware, which applicant believes may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

This Information Disclosure Statement:

- (a) ☒ accompanies the new patent application submitted herewith. 37 CFR § 1.97(a).
- (b) ☐ is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR § 1.491.
- (c) ☐ as far as is known to the undersigned, is filed before the mailing date of a first Office Action on the merits.
- (d) ☐ is filed after the first office action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final rejection or a notice of allowance, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR § 1.17(p) or a certification as specified in 37 CFR § 1.97(e), as checked below.
- (e) ☐ is filed after the mailing date of either a final rejection or a notice of allowance, whichever occurred first, and is accompanied by the fee (\$180) set forth in 37 CFR § 1.17(i)(1) and a certification as specified in 37 CFR § 1.97(e), as checked below. This document is to be considered as a petition requesting consideration of the information disclosure statement.

[If either of boxes (d) or (e) are checked above, the following "certification" under 37 CFR § 1.97(e) may need to be completed.] The undersigned certifies that:

- (f) ☐ Each item of information contained in the information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.
- (g) ☐ No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of this information disclosure statement.

A list of the patent(s) or publications(s) is set forth on the attached Form PTO-1449

(Modified). A copy of the items on PTO-1449 (Modified) is supplied herewith:

- (h) ☐ each
- (i) ☐ none
- (j) ☒ only those listed below:

C.A. King et al., "Very Low Cost Graded SiGe Base Bipolar Transistors for a High-Performance Modular BiCMOS Process", IEDM, 1999, pps. 565-568.

Wim van der Wel et al., "Poly-Ridge Emitter Transistor (PRET): Simple Low-Power Option to a Bipolar Process", IEDM, 1993, pps. 453-456.

IBM Technical Disclosure Bulletin, "Epi-Based Bipolar Transistor With Oxide-Defined Collector Window", Vol. 34, No. 1, June 1991, pps. 422-424.

JP04082268, 03/16/92, Japan, Class H01L, Subclass 27/14.

JP02260430, 10/23/90, Japan, Class H01L, Subclass 21/331.

JP06318602, 11/15/94, Japan, Class H01L, Subclass 21,331.

EP0779,663 A2, 06/18/97, Europe, Class H01L, Subclass 29/732.

Those patent(s) or publication(s) which are marked with an asterisk (\*) in the attached form PTO-1449 (Modified) are not supplied because they:

☐ were previously cited by or submitted to the Office in a prior application no. \_\_\_\_\_ filed \_\_\_\_\_ and relied upon in this application for an earlier filing date under 35 U.S.C. § 120 or

☒ are hereby waived pursuant to 37 CFR 1.98 (a)(2)(i) for all U.S. national patent applications filed after June 30, 2003.

A concise explanation of relevance of the described above and attached information is:

- (k) ☒ not given
- (l) ☐ given for each listed item

- (m) ☐ given for only non-English language listed item(s) [Required]
- (n) ☐ is in the form of an English language copy of a Search Report from a foreign patent office, issued in a counterpart application, which refers to the relevant portions of the references [copy attached].

While the information disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that the information referred to is "prior art" for this invention unless specifically designated as such.

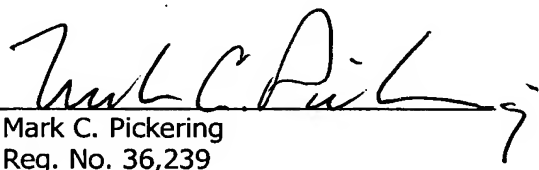
In accordance with 37 CFR § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR § 1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR § 1.98 and MPEP § 609 and the Examiner is respectfully requested to consider the above-described and attached information.

Respectfully submitted,

Dated: \_\_\_\_\_

4-9-04

By: \_\_\_\_\_

  
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Attorney for Assignee

Atty. Docket No: 100-15120 (P04976-P01-D01)

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<b>FORM PTO-1449</b>  <b>INFORMATION DISCLOSURE CITATION IN AN APPLICATION</b> Express Mail Number <u>EV364033441LLS</u> <i>(Use several sheets if necessary)</i>	Docket Number (Optional) 100-15120 (P04976-P01-D01)	Application No. New (Div. of 09/994,293)
Applicant(s) Abdalla Aly Naem		
Filing Date Herewith		Group Art Unit Unknown

U.S. PATENT DOCUMENTS												
EXAMINER INITIAL	DOCUMENT NUMBER							DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	*5	3	2	3	0	3	2	06/21/94	Sato et al.	257	198	09/08/92
	*5	3	2	0	9	7	2	06/14/94	Wylie	437	31	01/07/93
	*4	5	6	4	9	9	7	01/21/86	Matsuo et al.	29	576W	04/16/82
	*6	3	5	2	9	0	7	03/05/02	Gris	438	438	05/26/00
	*6	1	7	1	9	3	6	01/09/01	Fitzgerald	438	503	01/04/99
	*5	8	9	7	3	5	9	04/27/99	Cho et al.	438	312	12/09/97
	*5	6	4	8	2	8	0	07/15/97	Kato	437	31	09/26/95
	*5	3	6	2	6	6	9	11/08/94	Boyd et al.	437	67	06/24/93
	*5	0	7	7	2	2	7	12/31/91	Kameyama et al.	437	31	08/08/90
	*6	4	2	6	2	6	5	07/30/02	Chu et al.	438	312	01/30/01
	*5	5	0	8	2	1	3	04/16/96	Van Der Wel et al.	437	31	10/20/94
	*5	1	8	7	5	5	4	02/16/93	Miwa	307	586	04/29/91

FOREIGN PATENT DOCUMENTS													
	DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLAS S	Translation	
												Yes	No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)	
	C.A. King et al., "Very Low Cost Graded SiGe Base Bipolar Transistors for a High-Performance Modular BiCMOS Process", IEDM, 1999, pps. 565-568.
	Wim van der Wel et al., "Poly-Ridge Emitter Transistor (PRET): Simple Low-Power Option to a Bipolar Process", IEDM, 1993, pps. 453-456.

<b>EXAMINER</b>	<b>DATE CONSIDERED</b>
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.	

# INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Express Mail Number EV36403344115

Docket Number (Optional)

100-15120 (P04976-P01-D01)

Application Number

New (Div. of 09/994,293)

Applicant(s)

Abdalla Aly Naem

Filing Date

Herewith

Group Art Unit

Unknown

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
		*6,528,861 B1	03/04/03	Naem	257	565	02/04/02
		*6,337,251 B1	01/08/02	Hashimoto	438	309	03/29/00
		*6,333,235 B1	12/25/01	Lee et al.	438	309	04/12/00

## FOREIGN PATENT DOCUMENTS

	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
		JP04082268	03/16/92	Japan	H01L	27/14		✓
		JP02260430	10/23/90	Japan	H01L	21/331		✓
		JP06318602	11/15/94	Japan	H01L	21/331		✓
		EP0779,663 A2	06/18/97	Europe	H01L	29/732		✓

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

IBM Technical Disclosure Bulletin, "Epi-Based Bipolar Transistor With Oxide-Defined Collector Window", Vol. 34, No. 1, June 1991, pps. 422-424.

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